

passes Endangered Species Act. 80 nations sign treaty to protect endangered species and wild flora and fauna. EPA Theory is published on how chlorofluorocarbons (CFCs) destroy the stratospheric ozone layer, which protects Earth

# Safe Drinking Water for Everyone

Water quality has improved tremendously since the early seventies when portions of the Houston Ship Channel were among EPA's 10 most polluted bodies of water. Between 1973 and 1980, EPA upgraded municipal waste treatment facilities that discharge into the Channel, and all industrial facilities were ordered to upgrade wastewater treatment. By 1980, the restoration was described by EPA as "a most notable improvement, a truly remarkable feat."

Throughout our 30-year history, we have developed alliances with state and local partners to ensure the nation's waters will be restored and protected. Through EPA grants, billions of dollars have been spent upgrading treatment plants and building drinking water facilities.

Despite progress, much work remains. Forty percent of our waters are still not safe for fishing and swimming. About half of the country's 2,000 major watersheds, including the Mississippi River watershed, have water quality problems.

Two areas of interest for water protection in the Central-South region are the Gulf Coast and the lower Mississippi River.

Responding to concern over harmful chemicals in drinking water, such as low-level organics in the lower Mississippi River, EPA set standards under the 1974 Safe Drinking Water Act. Today,

Americans enjoy one of the world's safest drinking water supplies. Three-fourths of Americans served by public water systems get drinking water from lakes and rivers; the balance from ground water. In the Central-South region, most large systems, serving more than 20 million people, use surface water as a drinking water source.

Drinking water standards are in place for more than 80 contaminants. In 1998, President Clinton called on all public water suppliers to tell customers where their water comes from and what it contains. In 1998, 94 percent of America's public drinking water systems reported no violations of the health-based drinking water standards. More than 85 percent of all Americans now have safe, healthy drinking water. President Clinton has challenged EPA to raise this to 100 percent.

The Central-South region has the largest number of underground injection wells to dispose of wastes in the nation. Due to the region's extensive oil and gas production, almost 80,000 injection wells dispose of billions of gallons of oilfield waste into deep underground formations each year. This prevents waste from contaminating fresh ground and surface water as it did in the early 1900's. Along the Gulf Coast, there are 86 injection wells that dispose of billions of gallons of hazardous waste each year

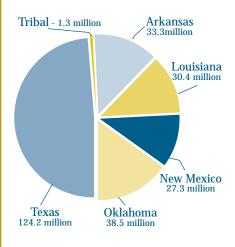
from the petrochemical industry. The underground injection control program assures the safe disposal of waste into deep underground formations where it is isolated far below fresh ground water.

# The Public's Right to Know

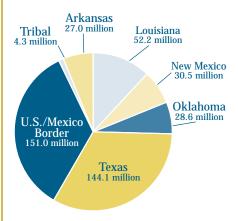
A new consumer confidence report rule requires water companies to tell customers about the source, quality, and possible contaminants in drinking water.

EPA and the states regulate more than 9,500 water systems serving over 33 million consumers in the Central-South region. In 1998, only 6 percent of America's public drinking water systems reported violations of a health-based drinking water standard.

## **EPA Funding Drinking Water** 1997 - 1999



### EPA Funding Water Quality 1999



EPA enforcement actions are key to maintaining safe drinking water. From 1994-1999, 1,157 actions were taken against public water systems in the region ranging from informal phone calls to full-blown criminal action.

### National Goal of Fishable, Swimmable Water

Armed with the 1972 Clean Water Act, EPA leads the fight to reduce industrial, municipal, and agricultural discharges into public waters. EPA annually helps prevent more than one billion pounds of toxic pollutants from entering our waterways.

In the past, massive fish kills were common and threatened the fishing industry in estuaries along the Gulf of Mexico. Through waste treatment improvements, water quality has improved. Fish are now plentiful in rivers once too contaminated to

support aquatic life. People now swim and fish in many lakes, such as Lake Pontchartrain, Louisiana, where before it was unthinkable.

Over 1,000 oil spills have been reported each year since 1987 in the Central-South region. The region has developed an industry-supported Expedited Settlement Agreement to prevent oil spills. Ocean dumping of sewage sludge, industrial waste, plastic debris and medical waste has been banned, and more than 30,000 major industrial dischargers pretreat waste before it enters sewers. These efforts have removed 75 percent of the toxic discharges from our sewers.

### **Water Quality**

In partnership with its states,



Wastewater treatment is important in protecting our drinking water sources.

converters in new vehicles. 1976 Congress mandates cradle-to-grave regulation of hazardous waste. President Gerald focuses on conservation and renewable, non-polluting energy resources. 1978 EPA and other agencies ban CFCs as a

the region identified watersheds not meeting their designated uses of fishing, swimming or drinking water. The region focuses on improved monitoring and on developing Total Maximum Daily Loads (TMDLs), which set pollution reduction goals for water bodies and provide a roadmap for restoring water quality.

In 1998, the region's states refined priority watersheds by developing Unified Watershed Assessments. The assessments promote joint water quality priority setting by state, Tribal, federal and local agencies. The resulting assessments have provided a framework that focuses resources on the most pressing problems.

States and Tribes identify designated uses for water

bodies, and water quality standards protect those uses. TMDLs and permits for point sources of pollution are based on water quality standards. When permits are violated, EPA and its state partners take enforcement actions.

EPA's Central-South region set a national precedent with action against the Sewerage and Water Board of New Orleans for pollution of Lake Pontchartrain. This was one of the first actions nationwide to incorporate preventive maintenance and spill response. On behalf of nearby citizens, EPA fined the city \$1.5 million and committed New Orleans to correct deficiencies that plagued the collection and treatment system for years. This action complemented ongoing

watershed protection and Lake Pontchartrain is showing signs of improvement.

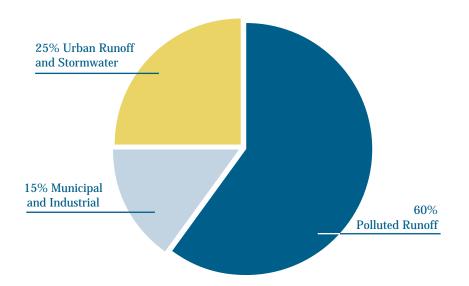
### **Challenges**

Polluted runoff is the biggest source of water pollution today. Agricultural sources of polluted runoff affect 70 percent of our rivers and streams and 49 percent of our lakes. Practices such as fertilizing fields with manure have contributed to this problem because farmland has become over-saturated with nutrients. Excess nitrogen and phosphorus flow as pollution into rivers, streams, and ground water. Also, runoff from commercial fertilizer. herbicides and pesticides causes water pollution.

Addressing polluted runoff is a major goal of the 1998 Clean Water Action Plan. EPA's Central-South region began hosting forums in 1998 with the Department of Agriculture, state agencies, associations, and farmers to build programs to protect and improve water quality.

The Clean Water Action Plan, issued to commemorate the 25th anniversary of the Clean Water Act, is about each of us working to protect the waters we love and share. Its goal is to protect waters by organizing citizens, business, and government to address local concerns.

### **Sources of Water Quality Impairment, on Average**



Ford mandates phase-out of polychlorinated biphenyls (PCBs). 1977 National energy plan of President Jimmy Carter propellant in most aerosol cans. 1979 An accident at Three Mile Island, near Harrisburg, PA, increases public debate